Amendments to the Specification:

Please replace paragraph 0001 on page 1 with the following rewritten paragraph:

[0001] This application is a continuation-in-part of U.S. Application Serial No. 10/386,586, filed March 11, 2003, now U.S. Patent No. 6,831,603. This application also claims priority from U.S. Provisional Application Serial No. 60/523,658 filed November 7, 2003.

Please replace paragraph 0007 on page 2 with the following rewritten paragraph:

[0007] Optical motion capture systems generally employ reflective patches adhered or sewn to an actor's clothing, and a light shining on the actor. Optical cameras record the reflections from the patches, and a processing system processes the images recorded by the cameras to determine the positions of the patches as the actor moves through a scene. Examples of optical motion capture systems include U.S. Patent Nos. 6,580,511 6,580,811 entitled Wavelet-Based Facial Motion Capture for Avatar Animation, and U.S. Patent No. 6,567,116 entitled Multiple Object Tracking System. The former patent incorporates wavelet transforms for feature detection and tracking. Optical motion tracking systems are limited to line-of-sight operation. Once a particular patch has been hidden from view by an actor's movement and the patch then reemerges into view, an operator must generally identify for the system by hand the reappeared patch.

Please replace paragraph 0009 on page 3 with the following rewritten paragraph:

Electromechanical devices and suits generally employ electromechanical sensors such as potentiometers to capture movements such as rotations of joints. The sensors can be connected by wires to the processing system, or the output of the sensors can be transmitted via a wireless connection. Electromechanical suits have been widely used in virtual reality simulation systems. Examples of electromechanical motion tracking systems include U.S. Patent No. 6,563,107

entitled Topological and Motion Measuring Tool, and U.S. Patent No. 6,070,269 ~~entilted~~ entitled

Data-Suit for Real-Time Computer Animation and Virtual Reality Applications.

Electromechanical systems are often bulky and obtrusive, and are not well suited for tracking the

relative movement of independent objects.